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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,511

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Pascal Agin

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23373 7590 08/19/2008  
SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

BOKHARI, SYED M

ART UNIT

PAPER NUMBER

2616

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,511	<b>Applicant(s)</b> AGIN ET AL.	
	<b>Examiner</b> SYED BOKHARI	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed on May 15<sup>th</sup>, 2008 has been entered. Claims 1, 34, 6-8 and 10 have been amended. Claim 11 has been canceled. Claims 12-21 have been added. Claims 1-10 and 12-21 are still pending in this application, with claims 1 and 10 being independent.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-4, 9-10, 12-13 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studle (2002/0006119 A1 in view of Virtanen (2001/0008521 A1).

Steudle discloses a communication system for defining measurement gaps in inter-frequency measurement with the following features: regarding claim 1, compressed mode configuration method in a mobile radio system, the method comprising, choosing a compressed mode configuration from a set of reference compressed mode configuration (Fig. 1, UMTS mobile structure, see "selecting the compressed mode from different several alternatives" recited in paragraph 0013 and lines 1-8 and paragraph 0014 lines 1-4), a compressed mode configuration is defined by compressed mode parameters (Fig. 3, generation of measurement gap, see "compressed mode parameters" recited in paragraph 0043 lines 1-18), the compressed mode parameters including a transmission gap length TGL (Fig. 3, generation of measurement gap, see "transmission gap length (TGL)" recited in paragraph 0043 lines 6-8), a transmission gap pattern length TGPL (Fig. 3, generation of measurement gap, see "transmission gap pattern length (TGPL)" recited in paragraph 0043 lines 9-12), the compressed mode parameters being determined so that, for each reference

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configuration (Fig. 3, generation of measurement gap, see “parameters signaled to mobile station” recited in paragraph 0042 lines 13-16), then TGL is made sufficiently large so that two transmission gaps to occur at two of the positions (Fig. 3, generation of measurement gap, see “larger gap” recited in paragraph 0042 lines 5-13); regarding claim 2, or otherwise a transmission gap pattern comprises a plurality of transmission gaps (Fig. 3, generation of measurement gap, see “transmission gap pattern length (TGPL)” recited in paragraph 0043 lines 9-12); regarding claim 3, in which the first system is of the UMTS type (Fig. 1, mobile telephone system, see “Universal mobile telephony system (UMTS)” recited in paragraph 0045 lines 1-6) and the second system is of the GSM type (Fig. 2, frame structure, see “measurements between WCDMA and GSM” recited in paragraph 0041 lines 1-9), and TGL is chosen from the group comprising the values 11, 12, 13, 14 (Fig. 3, generation of measurement gap, see “TGL group” recited in paragraph 0041 lines 1-9); regarding claim 9, in which the first system is of the UMTS type (Fig. 1, mobile telephone system, see “Universal mobile telephony system (UMTS)” recited in paragraph 0045 lines 1-6), the second system is of the GSM type (Fig. 2, frame structure, see “measurements between WCDMA and GSM” recited in paragraph 0041 lines 1-9) and a transmission gap pattern comprises two transmission gaps (Fig. 3, generation of measurement gap, see “two transmission gaps” recited in paragraph 0042 lines 1-5); regarding claim 10, network equipment for mobile radio system comprising (Fig. 1, mobile telephone system, see “UMTS and GSM” recited in paragraph 0045 lines 1-6) and means for implementing a compressed mode configuration method (Fig. 3, generation of measurement gap, see “means for

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implementation” recited in paragraph 0050 lines 1-8); regarding claim 10, network equipment for mobile radio system comprising, means for choosing a compressed mode configuration from a set of reference compressed mode configuration (Fig. 1, UMTS mobile structure, see “selecting the compressed mode from different several alternatives” recited in paragraph 0013 and lines 1-8 and paragraph 0014 lines 1-4), a compressed mode configuration is defined by compressed mode parameters (Fig. 3, generation of measurement gap, see “compressed mode parameters” recited in paragraph 0043 lines 1-18), the compressed mode parameters including a transmission gap length TGL (Fig. 3, generation of measurement gap, see “transmission gap length (TGL)” recited in paragraph 0043 lines 6-8), a transmission gap pattern length TGPL (Fig. 3, generation of measurement gap, see “transmission gap pattern length (TGPL)” recited in paragraph 0043 lines 9-12), the compressed mode parameters being determined so that, for each reference configuration (Fig. 3, generation of measurement gap, see “parameters signaled to mobile station” recited in paragraph 0042 lines 13-16), then TGL is made sufficiently large so that two transmission gaps to occur at two of the positions (Fig. 3, generation of measurement gap, see “larger gap” recited in paragraph 0042 lines 5-13); regarding claim 12, or otherwise a transmission gap pattern comprises a plurality of transmission gaps (Fig. 3, generation of measurement gap, see “transmission gap pattern length (TGPL)” recited in paragraph 0043 lines 9-12); regarding claim 13, in which the first system is of the UMTS type (Fig. 1, mobile telephone system, see “Universal mobile telephony system (UMTS)” recited in paragraph 0045 lines 1-6) and the second system is of the GSM type (Fig. 2, frame

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structure, see “measurements between WCDMA and GSM” recited in paragraph 0041 lines 1-9), and TGL is chosen from the group comprising the values 11, 12, 13, 14 (Fig. 3, generation of measurement gap, see “TGL group” recited in paragraph 0041 lines 1-9); regarding claim 19, in which the first system is of the UMTS type (Fig. 1, mobile telephone system, see “Universal mobile telephony system (UMTS)” recited in paragraph 0045 lines 1-6), the second system is of the GSM type (Fig. 2, frame structure, see “measurements between WCDMA and GSM” recited in paragraph 0041 lines 1-9) and a transmission gap pattern comprises two transmission gaps (Fig. 3, generation of measurement gap, see “two transmission gaps” recited in paragraph 0042 lines 1-5); regarding claim 10, network equipment for mobile radio system comprising (Fig. 1, mobile telephone system, see “UMTS and GSM” recited in paragraph 0045 lines 1-6) and means for implementing a compressed mode configuration method (Fig. 3, generation of measurement gap, see “means for implementation” recited in paragraph 0050 lines 1-8); regarding claim 20, comprising signaling to a mobile terminal compressed mode parameters corresponding to the chosen compressed mode configuration (Fig. 3, generation of measurement gap, see “signaled to the mobile terminal compressed mode” recited in paragraph 0042 lines 13-16) and regarding claim 21, comprising signaling to a mobile terminal compressed mode parameters corresponding to the chosen compressed mode configuration (Fig. 3, generation of measurement gap, see “signaled to the mobile terminal compressed mode” recited in paragraph 0042 lines 13-16).

Steudle does not disclose the following features: regarding claim 1, the transmission gaps being defined in a first transmission time structure specific to a first system, being determined relative to a second transmission time structure specific to a second system, to enable measurements on the second system to be effected in the first system, if the TGPL is such that the transmission gaps occur periodically at fixed positions in the second structure, and the closest together, overlap, with an overlap length greater than the time necessary to effect a measurement; regarding claim 2, in which the compressed mode parameters are determined so that, otherwise and for each reference configuration, TGPL is chosen so that the transmission gaps do not occur periodically at fixed positions in the second structure; regarding claim 4, in which TGL preferably has the value 14; regarding claim 10, the transmission gaps being defined in a first transmission time structure specific to a first system, being determined relative to a second transmission time structure specific to a second system, to enable measurements on the second system to be effected in the first system, if the TGPL is such that the transmission gaps occur periodically at fixed positions in the second structure, and the closest together, overlap, with an overlap length greater than the time necessary to effect a measurement; regarding claim 12, in which the compressed mode parameters are determined so that, otherwise and for each reference configuration, TGPL is chosen so that the transmission gaps do not occur periodically at fixed positions in the second structure;

Virtanen discloses communication system with a method of preparing a inter-frequency handover with the following features: regarding claim 1, the transmission



gaps being defined in a first transmission time structure specific to a first system (Fig. 3, transmission period, see “first frequency transmission gaps” recited in paragraph 0024 lines 1-7), being determined relative to a second transmission time structure specific to a second system (Fig. 4, transmission gap pattern, see “second transmission gap” recited in paragraph 0024 lines 7-9), to enable measurements on the second system to be effected in the first system (Fig. 3, transmission period, see “performing measurements” recited in paragraph 0025 lines 1-3), if the TGPL is such that the transmission gaps occur periodically at fixed positions in the second structure (Fig. 2, position of transmission gap, see “similar transmission gap period” recited in paragraph 0009 lines 1-11) and the closest together, overlap, with an overlap length greater than the time necessary to effect a measurement (Fig. 4, transmission period, see “transmission gap overlapping” recited in paragraph 0055 lines 1-12); regarding claim 2, in which the compressed mode parameters are determined so that, otherwise (Fig. 6, data transmitted in compressed mode, see “step 604” recited in paragraph 0062 lines 1-11 and paragraph 0063 lines 8-9) and for each reference configuration, TGPL is chosen so that the transmission gaps do not occur periodically at fixed positions in the second structure (Fig. 4, transmission gap pattern (TGP) and fig. 6, step 605, see “duration of transmission gap period (TGP)” recited in paragraph 0056 lines 1-9 and paragraph 0063 lines 9-13); regarding claim 4, in which TGL preferably has the value 14 (Fig. 2, position of transmission gaps, see “gap of 14 time slots” recited in paragraph 0014 lines 8-11 and table 1 of prior art); regarding claim 10, the transmission gaps being defined in a first transmission time structure specific to a first system (Fig. 3, transmission period,

see “first frequency transmission gaps” recited in paragraph 0024 lines 1-7), being determined relative to a second transmission time structure specific to a second system (Fig. 4, transmission gap pattern, see “second transmission gap” recited in paragraph 0024 lines 7-9), to enable measurements on the second system to be effected in the first system (Fig. 3, transmission period, see “performing measurements” recited in paragraph 0025 lines 1-3), if the TGPL is such that the transmission gaps occur periodically at fixed positions in the second structure (Fig. 2, position of transmission gap, see “similar transmission gap period” recited in paragraph 0009 lines 1-11) and the closest together, overlap, with an overlap length greater than the time necessary to effect a measurement (Fig. 4, transmission period, see transmission gap overlapping” recited in paragraph 0055 lines 1-12); regarding claim 12, in which the compressed mode parameters are determined so that, otherwise (Fig. 6, data transmitted in compressed mode, see “step 604” recited in paragraph 0062 lines 1-11 and paragraph 0063 lines 8-9) and for each reference configuration, TGPL is chosen so that the transmission gaps do not occur periodically at fixed positions in the second structure (Fig. 4, transmission gap pattern (TGP) and fig. 6, step 605, see “duration of transmission gap period (TGP)” recited in paragraph 0056 lines 1-9 and paragraph 0063 lines 9-13) and regarding claim 14, in which TGL preferably has the value 14 (Fig. 2, position of transmission gaps, see “gap of 14 time slots” recited in paragraph 0014 lines 8-11 and table 1 of prior art).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Studle by using the features, as taught by Virtanen in

order to provide the function of first transmission time structure and second time structure. The motivation of doing this is to enhance the functionality of transmission/receipt in a cost effective manner.

6. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studle (2002/0006119 A1 in view of Virtanen (2001/0008521 A1) as applied to claim 1 above, and further in view of Vayanos et al. (2003/0026235 A1).

Studle and Virtanen describe the claimed limitations as discussed in paragraph 5 above. Studle and Virtanen do not disclose the following features: regarding claim 5, in which the first system is of the UMTS type, the second system is of the GSM type, and TGPL is chosen so that it is not a multiple of 6 and regarding claim 15, in which the first system is of the UMTS type (Fig. 5, frame format and slot format, see “ UMTS radio access network (UTRAN)” recited in paragraph 0044 lines 1-9), the second system is of the GSM type.

Vayanos et al. discloses the techniques to time-share a common channelization code among multiple terminals for compressed mode transmission with the following features: regarding claim 5, in which the first system is of the UMTS type (Fig. 5, frame format and slot format, see “ UMTS radio access network (UTRAN)” recited in paragraph 0044 lines 1-9), the second system is of the GSM type (Fig. 1, wireless communication system, see “GSM system” recited in paragraph 0064 lines 1-3) and TGPL is chosen so that it is not a multiple of 6 (Fig. 6, compressed mode transmission,

see “transmission gap pattern length (TGPL)” recited in paragraph 0064 lines 3-10); regarding claim 15, in which the first system is of the UMTS type (Fig. 5, frame format and slot format, see “ UMTS radio access network (UTRAN)” recited in paragraph 0044 lines 1-9), the second system is of the GSM type (Fig. 1, wireless communication system, see “GSM system” recited in paragraph 0064 lines 1-3) and TGPL is chosen so that it is not a multiple of 6 (Fig. 6, compressed mode transmission, see “transmission gap pattern length (TGPL)” recited in paragraph 0064 lines 3-10).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Studle with Virtanen by using the features, as taught by Vayanos et al., in order to provide the function of multiple TGPL. The motivation of doing so is to enhance the function to the level of W-CDMA in cost effective manner.

7. Claims 6-8 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Studle (2002/0006119 A1 in view of Virtanen (2001/0008521 A1) as applied to claim 1 above, and further in view of the Change of Request report (Utilization of compressed mode for BSIC reconfirmation, document R2-002434, spec. 25.922, CR 011 and version 3.3.0).

Studle and Virtanen describe the claimed limitations as discussed in paragraph 5 above. Studle and Virtanen do not disclose the following features: regarding claim 6, in which TGPL is chosen from a group comprising the values 13, 14, 15, 16; regarding claim 7, in which for TGPL equal to 13, TGL is chosen from a group comprising the values 5, 7, 10, 14 and regarding claim 8, in which for TGPL equal to 16, TGL is chosen

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from a group comprising the values 7, 10, 14; regarding claim 16, in which TGPL is chosen from a group comprising the values 13, 14, 15, 16; regarding claim 17, in which for TGPL equal to 13, TGL is chosen from a group comprising the values 5, 7, 10, 14 and regarding claim 18, in which for TGPL equal to 16, TGL is chosen from a group comprising the values 7, 10, 14

The above CR document discusses the utilization of compressed mode for BSIC Reconfirmation with the following features: regarding claim 6, in which TGPL is chosen from a group comprising the values 13, 14, 15, 16 (table, transmission gap pattern sequences, see “TGPL with TGL for BSIC reconfirmation” recited in paragraph 6 on page 3GPP); regarding claim 7, in which for TGPL equal to 13, TGL is chosen from a group comprising the values 5, 7, 10, 14 (table, transmission gap pattern sequences, see “TGPL with TGL for BSIC reconfirmation” recited in paragraph 6 in 5.1.6.2.3.3) and regarding claim 8, in which for TGPL equal to 16, TGL is chosen from a group comprising the values 7, 10, 14 (table, transmission gap pattern sequences, see “TGPL with TGL for BSIC reconfirmation” recited in paragraph 6 page 3GPP); regarding claim 16, in which TGPL is chosen from a group comprising the values 13, 14, 15, 16 (table, transmission gap pattern sequences, see “TGPL with TGL for BSIC reconfirmation” recited in paragraph 6 on page 3GPP); regarding claim 17, in which for TGPL equal to 13, TGL is chosen from a group comprising the values 5, 7, 10, 14 (table, transmission gap pattern sequences, see “TGPL with TGL for BSIC reconfirmation” recited in paragraph 6 in 5.1.6.2.3.3) and regarding claim 18, in which for TGPL equal to 16, TGL is chosen from a group comprising the values 7, 10, 14

(table, transmission gap pattern sequences, see "TGPL with TGL for BSIC reconfirmation" recited in paragraph 6 page 3GPP)

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the method of Studle with Virtanen by using the features, as indicated in the above CR, in order to provide the function of multiple TGPL comprising valve of 13,14,15,16 and selection of TGL or TGPL with respect to other selected value of either. The motivation of doing so is to enhance the function with the setting of the parameters as outlined in GSM BSIC reconfirmation.

### ***Response to Arguments***

6. Applicant's arguments filed May 15<sup>th</sup>, 2008 have been fully considered but they are not persuasive. Applicant states regarding claim1, "neither Steudle or Virtanen teaches or suggests choosing a compressed mode configuration from a set of reference compressed mode configuration". Examiner respectfully disagrees. Steudle teaches choosing a compressed mode configuration from a set of reference compressed mode configuration (see paragraph 0013 and lines 1-8 and paragraph 0014 lines 1-4). Applicant states regarding claim10, "neither Steudle or Virtanen teaches or suggests choosing a compressed mode configuration from a set of reference compressed mode configuration". Examiner respectfully disagrees. Steudle teaches choosing a compressed mode configuration from a set of reference compressed mode configuration (see paragraph 0013 and lines 1-8 and paragraph 0014 lines 1-4). Applicant states regarding claim 5, "Vayanos does not teach or suggest the already

discussed requirement of claim 1". Examiner respectfully disagrees. Steudle teaches choosing a compressed mode configuration from a set of reference compressed mode configuration (see paragraph 0013 and lines 1-8 and paragraph 0014 lines 1-4).

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SYED BOKHARI whose telephone number is (571)270-3115. The examiner can normally be reached on Monday through Friday 8:00-17:00 Hrs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang B. Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kwang B. Yao/

Supervisory Patent Examiner, Art Unit 2616